

## **Evaluation of oral pregabalin effects on postoperative pain control after orthopedic surgery on fracture of lower limbs in Fatemi hospital in 1390**

### **Abstract**

**Background and Aims:** postoperative pain is one of the problems that the lack adequate control of it has many complications, and postoperative adequate control of pain has a special importance in terms of preventing the negative complications such as tachycardia, hypertension, myocardial ischemia, decreasing in alveolar ventilation and wound poor improvement. In this study we are evaluating the preoperative administration of pregabalin, its efficiency and safety in pain reduction after lower limbs orthopedic surgery and reduction in narcotic requirement and its relative side-effects.

**Material and Methods:** this double blind clinical trial study carried out on 60 patients whose were candidates for surgery in Fatemi hospital because of fractures in pelvis, femur and tibia. Patients were allocated to two groups, one group has received a 150 mg pregabalin capsules 2 hours before surgery and the other group has received placebo as a control. In both groups patient's condition was evaluated in 2, 6, 12 and 24 h postoperatively, and so the pain scores of patients based on Visual Analogue Scale VAS criteria by zero to 10 scale ruler, sedation score of patients by Ramsay sedation scoring, nausea and vomiting rate by N&V Score criteria and presence or absence of hallucinations and was recorded in check lists. Then data was analyzed by SPSS v16.

**Results:** In this study 60 patients were participated that among them 31 patients (51.7%) were male and 29 patients (48.3%) were female. The age averages of these patients in pregabalin and placebo group were  $43.66 \pm 12.17$  and  $41.93 \pm 11.39$  years respectively. Moreover, in this study was observed that in pregabalin group nausea and vomiting scores in all evaluation hours, sedation rate in hours 2 and 6 as well as pethidine consumption rate in all hours was reduced significantly.

**Conclusion:** Pregabalin administration preoperatively can be associated with useful pain control for patients. Since this medicine reduced the pethidine consumption, it can although has a slight effect on hospital drug costs.

**Key words:** Pregabalin, lower limb fracture, pain.